

Session III: WG3: LULUCF Sector Introduction

National States of Application of Remote Sensing and GIS to LULUCF Inventories

9 July 2009, Seoul, Korea
7th Workshop on GHG Inventories in Asia

Takako Ono

Greenhouse Gas Inventory Office of Japan (GIO)
National Institute for Environmental Studies (NIES)

Topic and Objectives of this Session



- **Topic:**
 - How to utilize remote sensing and GIS data for LULUCF inventories
- **Objectives:**
 - To share information on how to concretely apply remote sensing and GIS data as Activity Data of LUULCF inventories,
 - To discuss how to ensure actual application of remote sensing and GIS data to LULUCF inventories.



Outcomes from WGIA6



- Result of Discussion in WGIA6:
 - Combination of remote sensing, GIS data and modeling is effective for estimation of the LULUCF sector.
- Recommendations:
 - The participants in the previous LULUCF group session recommended:
 - to hold a training session for Tier 3 modeling,
 - to share country experiences on uncertainty assessment and activity data collection.



Progresses after WGIA6



- **Training Session for Tier 3 modeling:**
 - Inquired a person in charge of developing the Century model about the possibility of a half-day training session,
 - Received an answer that a half-day session is too short and insufficient for training the model,
 - Decided to postpone this topic as a future issue.
- **Data Collection:**
 - Received a recommendation to focus on collecting data by utilizing remote sensing and GIS data and discuss it more in detail than the previous LULUCF session in WGIA6,
 - Researched current national states of applying remote sensing and GIS data to LULUCF Inventories.



Current national states of applying remote sensing and GIS data to LULUCF Inventories.



- Annex I:
 - Two Annex-I countries developed LULUCF inventories by using only remote sensing data as their Activity Data.

Nation	Used Remote Sensing Data
Australia	NOAA/AVHRR Landsat MMS, TM, ETM+
France (French Guiana only)	Landsat, SPOT



Current national states of applying remote sensing and GIS data to LULUCF Inventories.



- non-Annex I:

Nation	Used Remote Sensing Data
Brazil	Landsat
India	Landsat, IRS P6 (Sensor LISS III)
Thailand	Landsat TM, SPOT

Nation	Remote Sensing Data interested in using
Cambodia	Landsat
Korea	Kompsat II
Malaysia	ALOS, EOS AM-1 (MODIS)
Mongolia	Landsat
Myanmar	Landsat
Thailand	EOS AM-1 (MODIS)

Presentations in the LULUCF group session



1. Utilizing Global Map for addressing Climate Change
 - Ms. Noriko Kishimoto (Japan)

2. Application of Remote Sensing to Forest Inventory for Identifying Deforestation and Degradation
 - Dr. Yasumasa Hirata (Japan)

3. Thailand's experience with Remote Sensing and GIS
 - Dr. Savitri Garivait (Thailand)

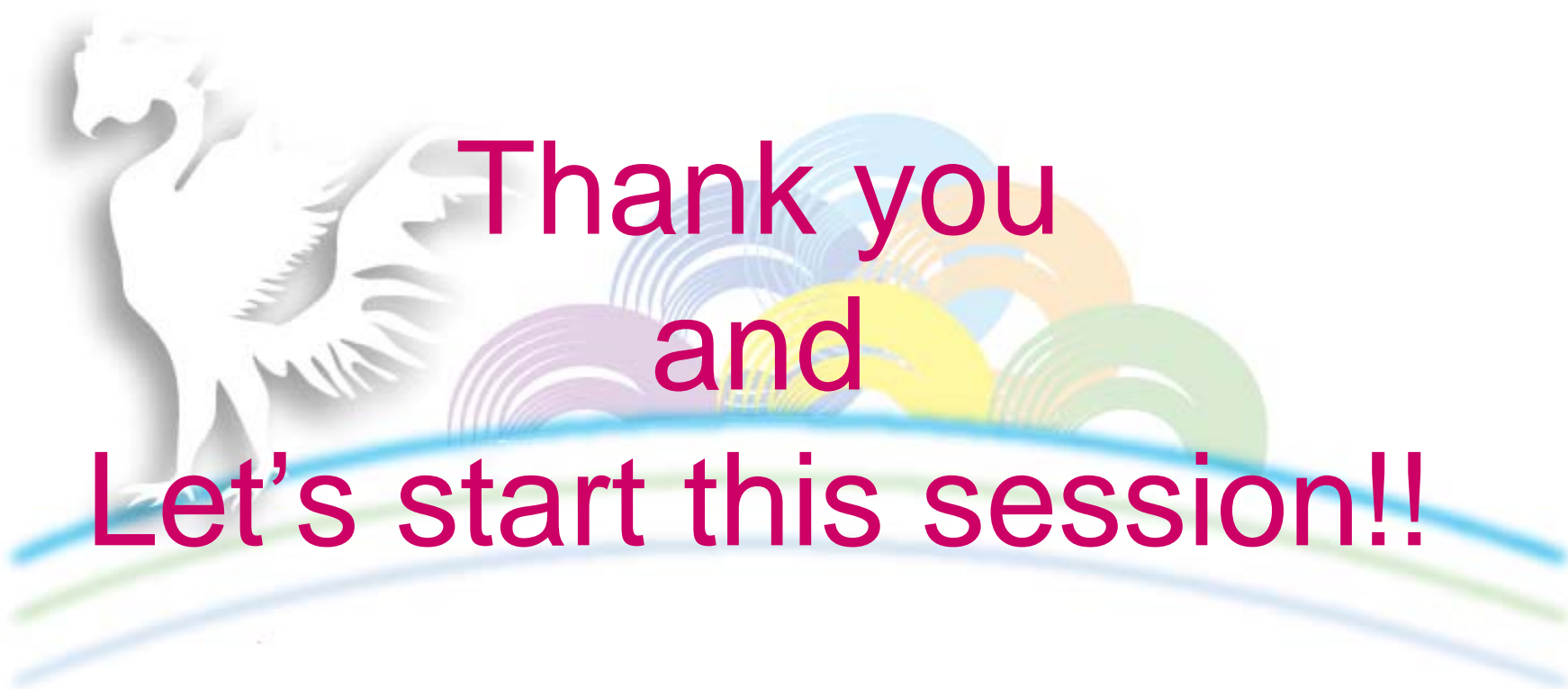
4. Korea's experience with Remote Sensing and GIS
 - Dr. Hyun Kook Cho (Korea)



Points of Discussion

- How do we identify or estimate concrete data by applying remote sensing and GIS data?
 - For example, how the following data are identified or estimated?:
 - Forest carbon stocks, forest types and degradation,
 - Land areas of cropland and grassland,
 - Soil data.
- How do we verify remote sensing and GIS data?
- What kind of resources are necessary for utilizing remote sensing and GIS data?
- What type of institutional arrangement is effective for applying remote sensing and GIS data to LULUCF inventories?





**Thank you
and
Let's start this session!!**